

CLAIMS

1. A fluid mixing apparatus adapted to mix a first fluid and a second fluid with each other, characterized in that the apparatus includes a first fluid
5 supply passage, a second fluid supply passage, and a mixing unit for mixing the first fluid and second fluid with each other to generate a mixed fluid,
the first fluid supply passage branching out into a first passage and a second passage via a flow ratio regulator,
the second passage branching out at a branching portion thereof into
10 a third passage in which a flow ratio is set in advance,
the third passage being connected to the mixing unit,
the second fluid supply passage and a fourth passage being connected to the mixing unit,
a mixed fluid generated by mixing with each other in the mixing unit
15 the first fluid flowing from the third passage thereinto and the second fluid flowing from the second fluid supply passage thereinto being made to flow out into the fourth passage,
the fourth passage joining the second passage or the first passage which is on the downstream side of the branching portion,
20 the second passage joining the first passage.
2. A fluid mixing apparatus according to Claim 1, wherein quantity of the first fluid flowing in the third passage is regulated in the branching portion so that the quantity of the first fluid flowing in the third passage becomes 1/50 to
25 1/100 of that of the first fluid flowing in the second passage.
3. A fluid mixing apparatus according to Claim 1 or Claim 2, wherein the first fluid is pure water, and the second fluid carbon is dioxide.
- 30 4. A cutting apparatus characterized in that the apparatus is provided with at least a chuck table holding a work thereon, a cutting means for cutting a work held on the chuck table, and such a fluid mixing apparatus as is defined in Claims 1, 2 or 3, wherein
the cutting means being provided with at least a rotary blade for

cutting the work held on the chuck table, and a nozzle for supplying cutting water to a position for cutting the work,

the nozzle being adapted to supply therefrom the cutting water, which is generated by the fluid mixing apparatus, to the work cutting position.